

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): An adaptive variable-length coding method whereby quantized orthogonal transform coefficients are scanned in a zigzag pattern, are modified into run, level data and then are variable-length coded in a coding system for image data, said method comprising the steps of:

setting a plurality of variable-length coding tables having different patterns of a regular region and an escape region according to statistical characteristics of said run, level data;

selecting one of said plurality of variable-length coding tables according to intra/inter mode information of the currently processed block, zigzag scanning position and quantization step size; and

variable-length coding the orthogonal transform coefficients according to said selected variable-length coding table, wherein said selecting step has the selecting range of a plurality of variable-length coding tables having different patterns of a regular region and an escape region according to said intra/inter mode information of the currently processed block.

2. (original): The adaptive variable-length coding method as claimed in claim 1, wherein said variable-length coding table is selected in accordance with said zigzag scanning position and quantization step size within the range determined by the corresponding mode.

3. (original): The adaptive variable-length coding method as claimed in claim 1, wherein data of said escape region of said variable-length coding table selected in said variable-length-coding step is coded into data having variable run-length and level-length.

4. - 7. (canceled).

Please add the following new claims, as follows. The entire text of new claims 8-13 is underlined, in accordance with 37 C.F.R. § 1.173(b) and (d).

8. An adaptive variable-length coding method in which quantized orthogonal transform coefficients are scanned in a predetermined pattern, and then are variable-length coded in a coding system for image data, said method comprising the steps of:

setting a plurality of variable-length coding tables;

selecting one of said plurality of variable-length coding tables according to intra/inter mode information, scanning position and quantization step size, wherein said plurality of variable-length coding tables comprise:

a table selectable for an alternating-current (AC) component of an intra mode that is different from a table selectable for an inter mode, and

a table selectable for a direct-current (DC) component of said intra mode; and
variable-length coding said quantized orthogonal transform coefficients according to said selected variable-length coding table

wherein said variable-length coding tables have different patterns of a regular region and an escape region.

9. The adaptive variable-length coding method as claimed in claim 8, wherein said variable-length coding table is selected in accordance with said scanning position and quantization step size within the range determined in accordance with said intra/inter mode information.

10. The adaptive variable-length coding method as claimed in claim 8, wherein data of said escape region of said variable-length coding table selected in said variable-length-coding step is coded into data having variable run-length and level-length.

11. An adaptive variable-length coding method in which quantized orthogonal transform coefficients are scanned in a predetermined pattern, and then are variable-length coded in a coding system for image data, said method comprising the steps of:

setting a plurality of variable-length coding tables;

selecting one of said plurality of variable-length coding tables according to intra/inter mode information, scanning position and quantization step size, wherein said selecting step has the selecting range of a plurality of variable-length coding tables, and said plurality of variable-length coding tables comprise:

a table selectable for an alternating-current (AC) component of an intra mode that is different from a table selectable for an inter mode; and

a table selectable for a direct-current (DC) component of said intra mode;

and

variable-length coding said quantized orthogonal transform coefficients according to said selected variable-length coding table,

wherein said variable-length coding tables have different patterns of a regular region and an escape region.

12. The adaptive variable-length coding method as claimed in claim 11, wherein said variable-length coding table is selected in accordance with said scanning position and quantization step size within the range determined in accordance with said intra/inter mode information.

13. The adaptive variable-length coding method as claimed in claim 11, wherein data of said escape region of said variable-length coding table selected in said variable-length-coding step is coded into data having variable run-length and level-length.